WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
COLORADO and NEW MEXICO

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
FEB. 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	LOCATION	COOPERATING WITH
RIVER BASINS			
WESTERN UNITED STATES	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

REPORTS	ISSUED	AGENCY
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

FEDERAL-STATE COOPERATIVE

SNOW SURVEYS AND WATER SUPPLY FORECASTS

for

COLORADO RIVER, PLATTE RIVER
ARKANSAS RIVER AND RIO GRANDE
DRAINAGE BASINS

Issued

February 1, 1965

Report Prepared By
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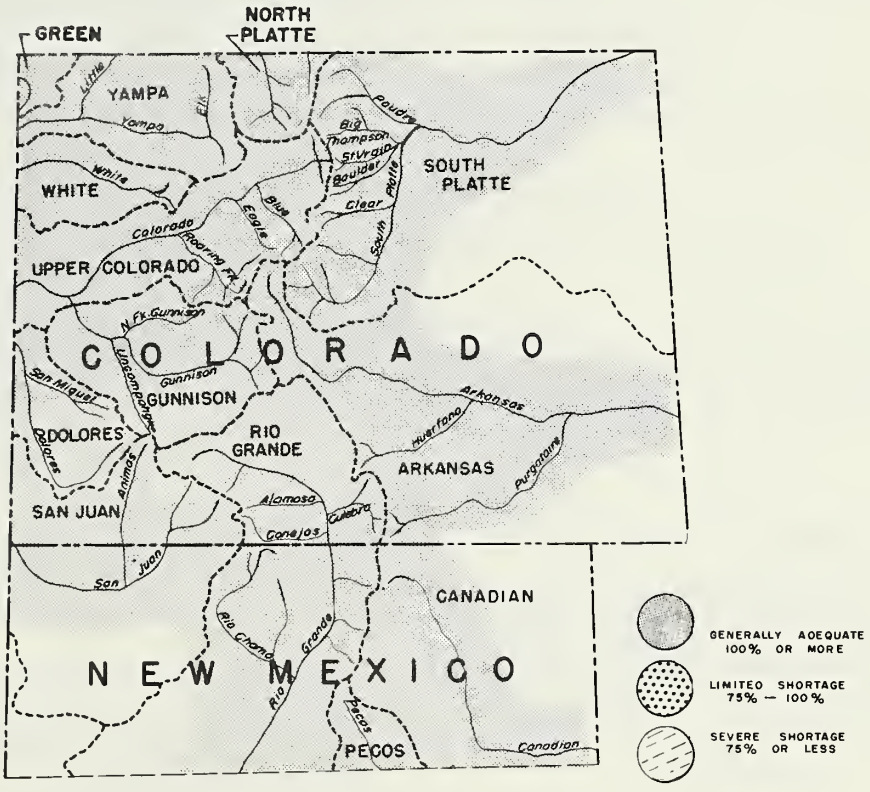
and
Don W. McAndrew, Assistant Snow Survey Supervisor
Fort Collins, Colorado

United States Department of Agriculture
Soil Conservation Service
and
Colorado Agricultural Experiment Station
Fort Collins, Colorado

State Engineer of Colorado
Denver, Colorado
and
State Engineer of New Mexico
Santa Fe, New Mexico

WATER SUPPLY OUTLOOK



THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS FROM THIS DATE TO THE END OF THE FORECAST PERIOD. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAMFLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.

General Series No. 817

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO
as of
February 1, 1965

COLORADO—WATER supply outlook for Colorado as of February 1, 1965, has improved over the past few years throughout the state. Two of the areas that have been the driest in recent years, the Arkansas and Rio Grande, are loaded with snow this year. The South Platte Drainage has about 125% of normal snow pack. The Northwestern part of the state has the lowest snow pack percentage wize, which is 110% of the 1948-62 average. The Central and Southwestern part of the state has excellent snow cover. If the snow continues to fall at least normally for the rest of the winter, streamflow should be better than anytime since 1957.

NEW MEXICO—Contrary to tradition, it seems streams in Northern New Mexico should flow much greater than in any of the recent years. The headwaters area of the Rio Grande is loaded with snow and the snow fields in Northern New Mexico mountains are keeping pace at 144% of the 1948-62 average. If present rates of snowfall continue, the Upper and Middle Rio Grande and its tributaries should be well supplied with water.

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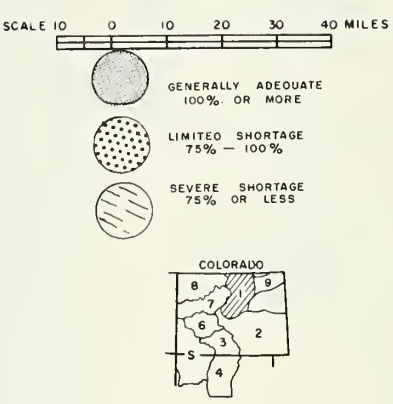
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

February 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL — Snow cover in the South Platte Drainage is generally above normal, however, several spots along the front range are slightly below the 15 year average. The South Platte area has been in a fortunate position for the last several years. Despite deficient runoff, water supplies have generally been sufficient due to good reservoir storage. Storage is now somewhat depleted and good summer streamflow is necessary. Average snow pack over the entire drainage stands at 125% of the 15 year average. Most of the snow surveys were made prior to the first of the month storm, but surveys made after that date indicate only a small increase.

SOIL MOISTURE — Soil moisture conditions are almost identical to last year, but slightly poorer than than normal in the high mountains. Valley soils are dry. Some areas received some relief over the 1st of the month storm.

RESERVOIRS -- Reservoir carry-over storage is slightly less than last year and considerably less than normal.

FORECASTS -- Numerical forecasts are made March 1, 1965.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist, Colorado

E. A. Nicholson, Area Conservationist, Littleton, Colorado

SNOW

SNOW COURSE		NO.	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVERAGE 1948-62
South Platte River and Tributaries							
Baltimore		5K23	2/1	28	6.1	2.8	- -
Berthoud Falls		5K13	2/1	55	12.5	5.8	9.0*
Big South		5J3	1/30	18	2.9	0.6	2.0
Boulder Falls		5J25	2/1	51	11.6	4.2	7.9*
Cameron Pass	(A)	5J1	Est.	60	15.6	12.2	13.7
Chambers Lake		5J2	1/30	37	8.8	2.8	6.0
Copeland Lake		5J18	1/28	16	3.2	1.7	3.8*
Deadman Hill	(A)	5J6	NS			7.5	8.8
Deer Ridge		5J17	1/29	15	2.9	1.6	3.6*
Empire		5K10	2/1	31	6.5	3.6	4.9*
Geneva Park		5K11	NS			NS	3.5*
Grizzly Peak	(B)	5K9	1/29	68	16.4	5.4	11.5
Hidden Valley		5J13	1/29	33	7.3	3.9	7.5
Hoosier Pass		6K1	1/28	46	12.6	4.2	8.1
Hour Glass Lake		5J11	NS			NS	4.3
Jefferson Creek		5K8	NS			NS	6.0*
Lake Irene	(B)	5J10	Est.	65	18.4	8.6	14.1
Long's Peak		5J22	1/31	44	9.3	2.9	7.6*
Lost Lake		5J23	1/30	48	11.5	4.7	8.2*
Loveland Lift No. 1		5K24	1/29	68	17.2	7.7	- -
Loveland Pass		5K5	1/29	51	14.0	4.8	9.6
Pine Creek		5J31	1/27	2	0.6	0.3	- -
Red Feather		5J10	1/27	13	2.8	1.8	5.1*
Two Mile		5J26	1/29	47	10.3	5.5	9.0*
University Camp		5J8	2/1	65	17.5	4.7	12.9
Ward		5J21	1/27	17	3.9	1.9	4.0*
Wild Basin		5J5	Eet.	42	9.6	4.1	9.4

* NOTE: 1948-62 (ADJUSTED AVERAGES)

NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
No forecasts issued until March 1, 1965			

(1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
(2) Observed flow plus by-pass to power plants.
(3) Observed flow minus diversions through Jones Tunnel.

This Report Prepared by
Jack N. Washichek and Don W.McAndrew
Soil Conservation Service
Colorado State University
Fort Collins, Colorado

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Antero	33.0	0	0	13.4
Barr Lake	32.2	13.2	17.1	18.6
Black Hollow	8.0	2.5	4.2	3.1
Boyd Lake	44.0	26.6	37.0	18.4
Cache La Poudre	9.5	2.6	8.4	5.8
Carter Lake	108.9	70.5	67.2	54.0
Chambers Lake	8.8	2.3	3.3	2.0
Cheeseman	79.0	21.3	22.7	49.4
Cobb Lake	34.3	24.1	9.5	9.3
Eleven Mile	81.9	28.3	60.8	74.2
Foesil Creek	11.6	25.3	7.7	5.4
Groee	43.1	26.4	18.4	- -
Halligan	6.4	4.6	2.1	2.4
Horsetooth	143.5	69.4	65.3	61.1
Lake Loveland	14.3	8.5	10.5	6.5
Lone Tree	9.2	0.5	8.4	5.6
Mariano	5.4	4.3	5.3	2.5
Marshall	10.3	0.4	0.9	2.1
Marston	18.9	14.8	12.4	13.5
Milton	24.4	1.1	12.3	10.1
Standley	18.5	3.4	4.8	8.2
Terry Lake	8.2	2.0	4.9	4.3
Union	12.7	6.4	9.9	7.6
Windsor	18.6	14.3	12.0	7.5

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alpine Camp	11/19	6.9	3.2	3.3	3.5
Beaver Dam	12/2	7.1	3.0	3.3	3.8
Clear Creek	12/2	9.5	7.0	7.6	6.7
Feather	11/5	10.1	4.2	4.2	4.6
Guard Station	12/2	6.9	2.8	3.1	3.4
Hoop Creek	11/17	4.9	2.6	3.6	2.7
Hoosier Pass	11/23	7.8	4.3	4.9	5.1
Kenosha Pass	11/23	4.4	2.3	2.8	2.6
Laramie Road	11/5	12.4	7.1	7.1	7.6
Two Mile	12/2	9.1	4.4	4.2	5.8

ALL PROFILES 4 FEET DEEP

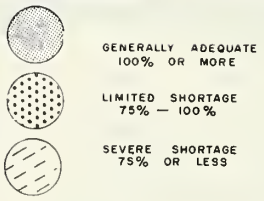
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

ARKANSAS RIVER WATERSHED IN COLORADO

as of

February 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- The Arkansas Drainage, which has been dry both summer and winter for several years, may get some relief. Snow covering the Upper Arkansas Basin is now much above normal. If snowfall remains above normal for the rest of the year a good runoff can be expected this summer.

SNOW -- Snow over the entire basin averages about 137% of the 15 year average. The best conditions are on the main stem above Leadville, but So. Fork Drainage also has an excellent early pack. Most of the surveys were made prior to the first of the month storm, so readings may be slightly low.

SOIL MOISTURE -- Mountain soil moisture stations indicate mountain soils are slightly wetter than usual. This will help increase the summer runoff. Valley soils in the high area are reported as fair, while the plains area is reporting extremely dry soil.

RESERVOIR STORAGE -- For the 3rd straight year there is practically no carry-over storage to report. All of the major reservoirs combined only contain 27,700 acre feet. This compares to a normal capacity of 174,000. These reservoirs will be of little help this summer. A much above average streamflow is needed.

FORECASTS -- No numerical forecasts are issued until March 1, 1965.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Will D. McCorkle, Area Conservationist.

SNOW

SNOW COURSE	NO.	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES)
Arkansas River						
Bigelow Divide	5L3				3.0	- -
Blue Lakes	5M6	1/27	12	2.9	NS	- -
Bourbon	5M5	NS			NS	- -
Cooper Hill	6K23	1/29	41	9.5	3.2	- -
Cucharas Pass	5M7	1/27	26	5.7	3.7	- -
East Fork	6K17	1/28	34	9.4	2.0	5.9*
Four Mile Park	6K7	1/28	30	7.3	1.5	3.4
Fremont Pass	6K8	1/28	46	12.8	5.9	10.7
Garfield	6L8	1/27	40	12.6	5.2	- -
LaVeta Pass (B)	5M1	1/27	32	8.9	4.2	6.8
Monarch Pass	6L4	1/27	48	14.0	6.5	11.5
St. Elmo (A)	6L5	NS			4.0	8.7*
Tennessee Pass	6K2	1/28	41	9.8	3.9	6.4
Tomichi	6L7	1/27	39	11.9	7.0	- -
Twin Lakes Tunnel	6K3	Est.	35	8.3	2.6	6.9
Westcliffe	5L2	NS			NS	- -

* - NOTE: 1948-62 (ADJUSTED AVERAGES)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Adobe Creek	61.6	0	0	13.1
Clear Creek	11.4	10.4	7.8	5.3
Cucharas	40.0	0	0.7	5.2
Great Plains	150.0	0	0	40.0
Horse Creek	26.9	0	0	5.2
John Martin	366.6	1.0	4.3	70.8
Meredith	41.9	0	0	6.2
Model	15.0	0	2.4	2.3
Sugar Loaf	17.4	5.3	4.2	6.8
Twin Lakes	57.9	11.0	16.8	19.3

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Garfield	11/13	6.7	4.7	2.4	3.3
King	11/13	3.3	2.3	0.8	1.8
LaVeta Pass	11/12	11.9	6.1	3.7	7.0
Leadville	12/3	7.8	5.2	4.1	3.9
Twin Lakes Tunnel	11/19	4.5	3.0	1.0	2.1

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
No forecasts issued until March 1, 1965			

This Report Prepared by
Jack N. Washichek and Don W. McAndrew
Soil Conservation Service
Colorado State University
Fort Collins, Colorado

(1) Observed flow plus change in storage in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Busk-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.

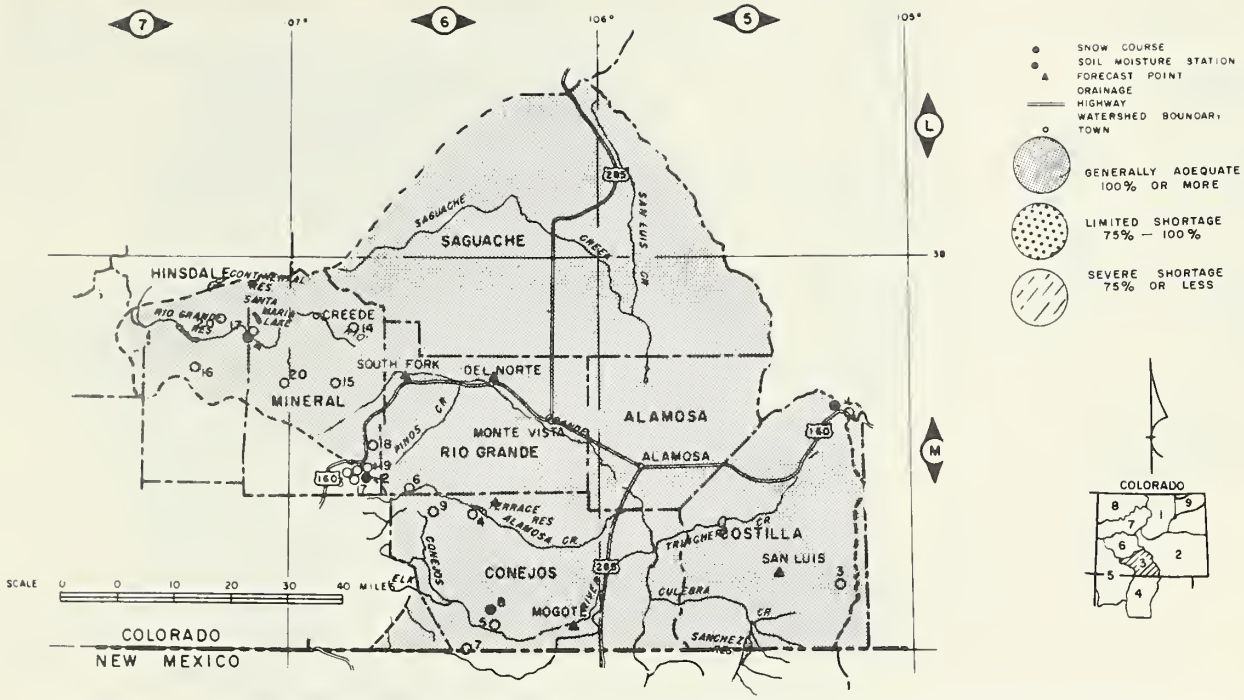
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

UPPER RIO GRANDE WATERSHED IN COLORADO

as of

February 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- For the first time in many years snow is flying often and in great amounts on the Rio Grande Drainage. Only twice since 1936 has the snow pack been so heavy on February 1st. The snow pack on the headwaters of the Rio Grande is 159% of normal, while snow on the Alamosa River is 156% of average. The three snow courses on the Conejos River indicate snow fall is even higher. Here there is 177% of the 1948-62 average. However, snow on the eastern part of the drainage, or the area along the Sangre De Cristo Range, is not so bountiful. Here snow fall is only 117% of normal. If snow fall continues at the present rate, irrigation supplies should be adequate this summer. Some of the snow courses were read prior to the 1st of the month storm and will be slightly less than that now on the ground.

RESERVOIR STORAGE -- Carry-over storage in the San Luis Valley is poor. February 1st storage is only 39% of normal. The snow pack could easily make up the deficiency in storage if snow fall keeps up at the present rate.

SOIL MOISTURE -- Soil moisture conditions in the high elevations of the Rio Grande Drainage are nearly normal for this time of year. Conditions are far better than last year at this time. Soil moisture in the irrigated area is reported as fair. Additional storms depositing snow in the valley could make conditions excellent by spring.

FORECASTS -- Forecasts are not issued this early in the water year. Forecasts will be made in March when snow season is more advanced.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist, Colorado

Benny Martin, Area Conservationist, Monte Vista, Colorado

SNOW

SNOW COURSE		NO.	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVERAGE 1948-62
Rio Grande in Colorado							
Cochetopa Pass		6L6	1/25	22	3.9	3.0	3.9*
Hiway		6M19	1/27	85	27.4	6.6	14.6*
Lake Humphreys	(A)	6M15	1/29	45	11.7	3.1	- -
Pass Creek		6M18	1/27	56	16.0	4.4	8.2*
Pool Table	(A)	6M14	1/29	40	10.0	2.6	- -
Porcupine	(A)	6M20	1/29	44	11.4	3.3	9.0*
Red Mountain Pass	(B)	7M15	1/29	81	25.6	12.3	18.0*
Santa Maria		7M17	NS			1.6	4.1
Upper Rio Grande		7M16	1/28	39	10.4	2.2	6.1
Wolf Creek Pass		6M1	1/27	94	30.8	8.2	19.3
Wolf Creek Summit	(B)	6M17	1/27	97	30.9	7.9	19.1*
Alamosa River							
Silver Lakes		6M4	NS			4.0	5.1
Summitville	(A)	6M6	1/29	64	18.6	5.1	11.9
Conejos River							
Cumbres Pass	(A)	6M7	1/29	72	23.8	4.6	13.0
Platoro	(A)	6M9	1/29	66	20.5	2.9	- -
River Springs		6M5	1/27	32	9.8	NS	6.0
Sangre De Cristo Range							
Blue Lakes	(B)	6M6	1/27	12	2.9	NS	- -
Cucharas Pass	(B)	5M7	1/27	26	5.7	3.7	- -
Culebra	(A)	6M3	1/29	32	9.1	1.5	6.6
LaVeta Pass		5M1	1/27	32	8.9	4.2	6.8

* - NOTE: 1948-62 (ADJUSTED AVERAGES)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Continental	26.7	1.0	0.7	4.7
Platoro	60.0	2.7	3.0	- -
Rio Grande	45.8	4.6	3.2	11.9
Sanchez	103.2	4.3	4.7	10.2
Santa Maria	45.0	2.6	2.8	6.6
Terrace	17.7	1.7	0.8	2.7

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alberta Park	11/10	8.2	5.9	3.3	4.8
Bristol View	11/2	6.1	3.5	0.2	4.4
LaVeta Pass	11/12	11.9	6.1	3.7	7.0
Mogote	11/12	10.7	5.0	NS	5.3

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
No forecasts issued until March 1, 1965			

(1) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoir

(2) Observed flow plus changes in storage in Sanchez Reservoir

This Report Prepared by
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Fort Collins, Colorado

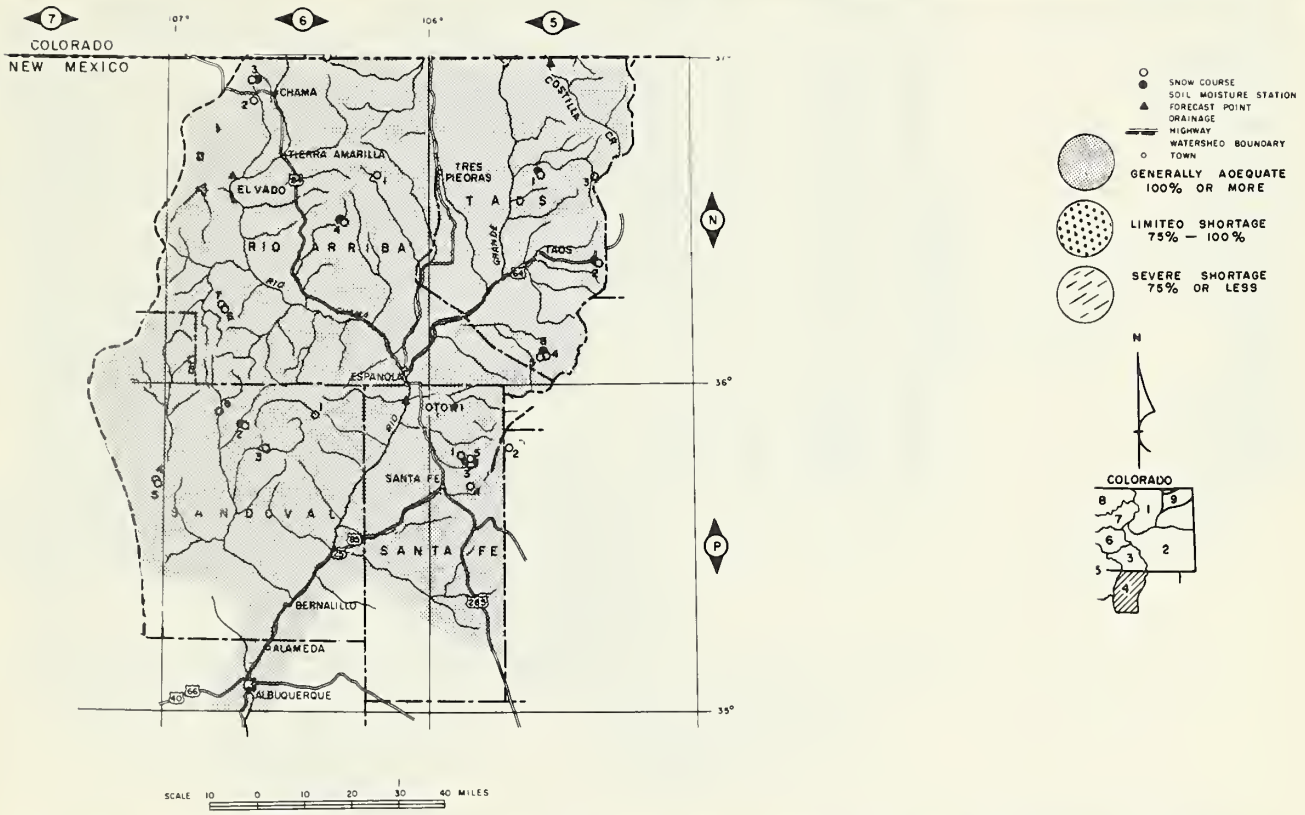
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

RIO GRANDE WATERSHED IN NEW MEXICO

as of

February 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Water users on the Rio Grande in New Mexico have prospects for a bumper water supply this summer if snowfall continues above normal. Snow pack on the headwaters of the Rio Grande in Colorado is about 160% of normal. The best reported in a number of years. The snow in Northern New Mexico is almost keeping pace with 144% of the 15 year average. If present rates of snowfall continue the Upper and Middle Rio Grande should be well supplied with water. The Lower Rio Grande may still have shortages, but the supplies should help the critical shortage in that area. Snow pack on the Canadian and Pecos Rivers is above normal.

SOIL MOISTURE -- Soil moisture stations throughout Northern New Mexico indicate soil moisture is better than last year and nearly normal. Only limited amounts of water will be needed from the snow pack to fill mountain soils. Soil Moisture in the irrigated areas of the Upper and Middle Rio Grande areas is reported as fair, while some of the Lower Rio Grande area is reported as poor to fair.

RESERVOIR STORAGE -- Carry-over storage in the major reservoirs of New Mexico is extremely poor. It is much less than normal and supplies were depleted last year. A heavy runoff is needed to restore storage in these reservoirs.

FORECASTS -- Numerical forecasts are made March 1 after the snow season has progressed further.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

Courtney A. Tidwell, State Conservationist, New Mexico

R. M. Bell, Area Conservationist, Santa Fe, New Mexico

SNOW

SNOW COURSE		NO.	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVERAGE 1948-62
Rio Grande (Colorado)							
Culebra	(A)	6M3	1/29	32	9.1	1.5	6.6
Cumbers Pass	(A)	6M7	1/29	72	23.8	4.6	13.0
LaVeta Pass		5M1	1/27	32	8.9	4.2	6.8
Platoro	(A)	6M9	1/29	66	20.5	2.9	- -
River Springs		6M5	1/27	32	9.8	NS	6.0
Santa Maria		7M17	NS			1.6	4.1
Silver Lakes		6M4	NS			4.0	5.1
Summitville	(A)	6M6	1/29	64	18.6	5.1	11.9
Upper Rio Grande		7M16	1/28	39	10.4	2.2	6.1
Wolf Creek Pass		6M1	1/27	94	30.8	8.2	19.3
Aspen Grove (New Mexico)		5P1	1/28	24	6.3	1.9	3.0
Bateman		6N4				NS	7.8*
Big Tesuque		5P3	1/25	31	7.9	1.8	3.7
Blue Bird Mesa		6P6	1/28	18	4.8	1.3	- -
Capuline Peak		6N6	1/27	23	5.9	1.6	- -
Chama Divide		6N2	1/29	21	5.4	0.5	3.9
Chamita		6N3	1/29	46	7.3	2.3	6.8
Cordova	(A)	5N5	1/30	39	9.8	3.3	7.0
Elk Cabin		5P4	1/29	13	4.3	1.3	2.9
Fenton Hill		6P2	1/25	22	4.6	0.6	3.4*
Hematite Park		5N3	1/28	21	4.8	1.8	3.8
Mora View		5N7	1/22	11	3.0	0.2	- -
Pajarito Peak		6P4	1/28	2	0.7	0.0	- -
Panchuela		5P2	1/27	18	4.5	0.3	2.6
Payrole	(A)	6N1	1/30	37	9.3	3.7	7.0
Philmont		5N6	NS			NS	- -
Quemazon		6P1	1/27	32	8.4	2.2	6.8*
Red River		5N1	1/29	27	6.8	2.5	5.3
Rio En Medio		5P5	1/25	37	9.8	4.0	5.2*
Sandaval		6P3	1/29	20	0.9	0.9	- -
Taos Canyon		5N2	1/28	20	5.2	2.1	3.9
Tres Ritos		5N4	1/22	20	5.4	2.9	3.8

NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE
* NOTE: 1948-62 (ADJUSTED AVERAGES)

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Alamorgordo	122.1	18.0	50.0	74.3
Elephant Butte	2206.8	122.6	132.6	390.2
El Vado	194.5	2.4	2.8	25.7
Caballo	344.0	12.3	32.9	79.8
McMillan-Avalon	37.0	2.6	18.2	15.1
Red Bluff (Tex)	307.0	19.4	35.6	71.4
Conchas	600.0	3.6	100.3	239.5

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Colorado					
Alberta Park	11/10	8.2	5.9	3.3	4.8
Bristol View	11/2	6.1	3.5	0.2	4.4
Mogote	11/12	10.7	5.0	NS	5.3
New Mexico					
Aqua Piedra	11/20	7.2	2.4	2.2	3.5
Bateman		6.7		0.7	2.2
Big Tesuque	11/6	3.7	0.5	1.9	1.2
Chamita	11/13	8.0	2.4	0.3	2.0
Fenton Hill	11/2	6.5	2.2	4.7	- -
Red Summit	11/23	4.8	1.5	2.4	2.5
Rio En Medio	11/6	3.5	0.6	1.8	1.1
Taos Canyon	11/23	3.3	1.7	2.0	2.3

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
No forecasts issued until March 1, 1965			

This Report Prepared by
Jack N. Washichek and Don W. McAndrew
Soil Conservation Service
Colorado State University
Fort Collins, Colorado

(10) Observed flow plus changes in storage in El Vado Reservoirs.

* Rio Grande at Otowi and Rio Grande at San Marcial Forecast and Average Mar-July inclusive.

WATER SUPPLY OUTLOOK WATERSHED V

FOR THE SOIL CONSERVATION DISTRICTS IN THE

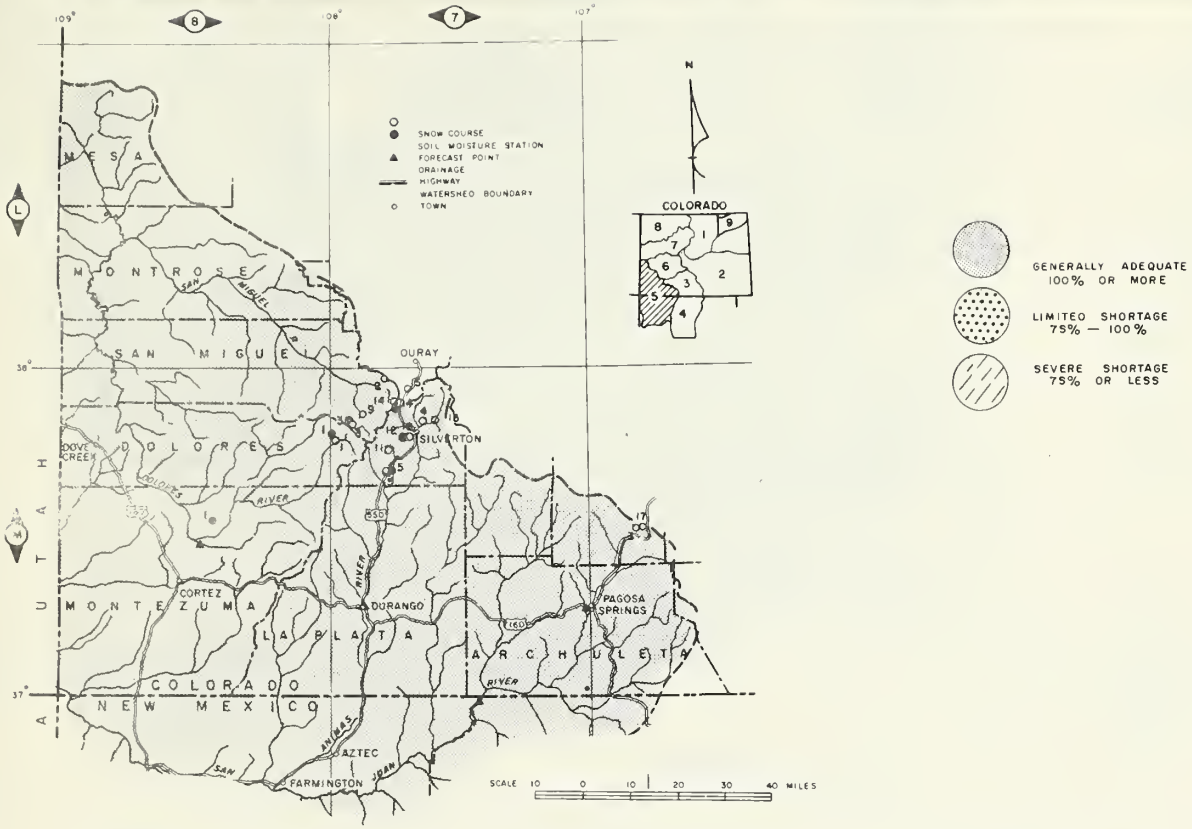
SAN MIGUEL - DOLORES - ANIMAS - SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of

February 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL — Current prospects are excellent for a more than adequate water supply this summer if the snowfall continues at the present rate. It is too early to be assured of adequate water, but current indications are very optimistic.

SNOW -- Snow pack in the San Juan Basin is much improved over last year and currently is 150% of average. The Animas and Dolores Basins are almost as high with 140% of the 1948-62 average. Most snow courses have 3 to 5 times as much snow as last year at this time. This is most encouraging. Snowfall must continue at at least a normal rate to guarantee adequate water supplies this summer.

SOIL MOISTURE — Soil moisture conditions are nearly normal for this time of year in the high mountains. In most cases soils are much wetter than last year. This will increase the flow from the melting snow.

RESERVOIR STORAGE -- Carry-over storage is about the same as last year and generally near normal.

FORECASTS -- No numerical forecasts are issued until March 1, 1965. At this time the snow season has advanced sufficiently to make reliable estimates of runoff.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist, Colorado
Benny Martin, Area Conservationist, Monte Vista, Colorado
Dearl Beach, Area Conservationist, Grand Junction, Colorado

C. A. Tidwell, State Conservationist New Mexico
Walter B. Rumsey, Area Conservationist Albuquerque, New Mexico

SNOW

SNOW COURSE		NO.	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVERAGE 1948-62
San Juan River							
Chama Divide	(B)	6N2	1/29	21	5.4	0.5	3.9
Chamita	(B)	6N3	1/29	46	7.3	2.3	6.8
Upper San Juan		6M3	1/27	102	31.3	9.2	21.7
Wolf Creek Pass	(B)	6M1	1/27	94	30.8	8.2	19.3
Wolf Creek Summit		6M17	1/27	97	30.9	7.9	19.1*
Animas River							
Cascade		7M5	1/28	44	12.4	4.4	8.9
Howardville		7M13	1/28	43	11.7	4.0	8.8*
Ironton Park	(B)	7M6	1/30	40	10.1	6.9	7.7
Mineral Creek		7M14	1/29	51	15.3	4.8	- -
Molas Lake		7M12	1/28	49	14.7	3.7	9.8*
Red Mountain Pass		6M19	1/29	81	25.6	12.5	18.0*
Silverton Sub-Station		7M4	1/28	32	8.9	2.1	4.6
Spud Mountain		7M11	1/27	74	23.1	6.9	16.7*
Dolores River							
Lizzard Head		7M3	1/28	53	16.4	5.7	10.9
Rico		7M1	1/28	33	8.5	3.2	5.9
Telluride		7M2	1/29	31	6.3	3.0	5.0
Trout Lake		7M9	1/29	46	12.2	4.6	8.6*

* NOTE: 1948-62 (ADJUSTED AVERAGES)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
No forecasts issued until March 1, 1965			

* OBSERVED FLOW PLUS CHANGES IN STORAGE IN VALLECITO RESERVOIR

RESERVOIR STORAGE (1,000 AC. FT.

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Groundhog	21.7	6.7	6.5	5.7
Vallecito	126.3	33.8	31.4	45.8
Navajo	1036.0	331.0	332.2	- -

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Cascade	12/9	9.1	6.0	5.3	6.7
Dolores	11/12	19.6	0.5	9.8	4.3
Lizzard Head	11/12	11.8	9.9	8.1	8.2
Mineral Creek	12/9	5.7	3.9	3.4	3.6
Molas Lake	12/9	9.4	3.9	4.3	4.2
Rico	11/12	13.8	13.1	5.9	9.1

ALL PROFILES 4 FEET DEEP

This Report Prepared by
Jack N. Washichek and Don W. McAndrew
Soil Conservation Service
Colorado State University
Fort Collins, Colorado

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

GUNNISON RIVER WATERSHED IN COLORADO

as of

February 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO

GENERAL — The Gunnison and Uncompahgre River Basins are in the best shape they have been since 1957. Snowfall has been above average over the entire basin and with normal precipitation for the remainder of the year, water supplies should be more than adequate for water users in the area.

SNOW -- The snow pack over the entire area is very good. The headwaters of the Gunnison Drainage is presently 126% of normal. The Uncompahgre River currently is 140% of the 1948-62 average. Since the snowfall has extended into the lower elevations this season, water supplies for small irrigated areas along tributary streams should be better than for the past few years.

SOIL MOISTURE -- As with other watersheds, the estimate of summer runoff is reduced somewhat because mountain soils are dryer than normal and the series of years of drought weather which tends to reduce the flow to be expected from a given snow pack.

FORECASTS -- Numerical forecasts are made starting March 1 after the snow season has progressed further.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
Colorado

Dearl Beach, Area Conservationist,
Grand Junction, Colorado

SNOW

SNOW COURSE		NO.	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVERAGE 1948-62
Gunnison River							
Alexander Lakes	(A)	7K3	2/1	54	13.5	7.0	12.9
Black Mesa		7L5	NS			NS	- -
Blue Mesa		7L2	NS			NS	- -
Butte		6L11	1/27	52	14.9	NS	- -
Cochetopa Pass		6L6	1/25	22	3.9	3.0	3.9*
Crested Butte		6L1	1/26	49	13.3	5.3	8.9
Keystone		7L3	1/27	66	20.9	8.1	- -
Lake City		7M8	NS			NS	- -
Long Gulch		7L4	NS			NS	- -
Mesa Lakes	(B)	7K4	1/28	47	11.9	6.5	10.8
Monarch Pass	(B)	6L4	1/27	48	14.0	6.5	11.5
McClure Pass	(A)	7K8	2/1	58	16.8	7.3	12.5*
Mineral Creek	(B)	7M14	1/29	51	15.3	4.8	- -
North Lost Trail	(A)(B)	7K1	2/1	65	15.9	6.4	9.5
Park Cone		6L2	1/26	38	10.1	3.2	7.1
Park Reservoir	(A)	7K6	2/1	62	17.1	8.3	13.9
Porphyry Creek		6L3	1/27	45	13.4	9.1	10.5
Tomichi		6L7	1/27	39	11.9	7.0	- -
Trickle Divide	(A)(B)	7K5	2/1	62	17.1	9.5	15.3
Uncompahgre River							
Ironton Park		7M6	1/30	40	10.1	6.9	7.7
Lizzard Head		7M3	1/28	53	16.4	5.7	10.9
Lone Cone		7M7	NS			NS	- -
Red Mountain Pass	(B)	7M15	1/29	81	25.6	12.5	18.0
Telluride		7M2	1/29	31	6.3	3.0	5.0
Trout Lake		7M9	1/29	46	12.2	4.6	8.6*

* - NOTE: 1948-62 (ADJUSTED AVERAGES)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Taylor	106.2	70.9	40.3	54.7

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Grand Mesa	11/9	12.5	9.0	8.4	- -
King	11/13	3.3	2.3	0.8	1.8
Mineral Creek	12/9	5.7	3.9	3.4	3.6
Placita	11/16	9.3	3.9	4.7	5.1

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
No forecast issued until March 1, 1965			

This Report Prepared by
Jack N. Washichek and Don W. McAndrew
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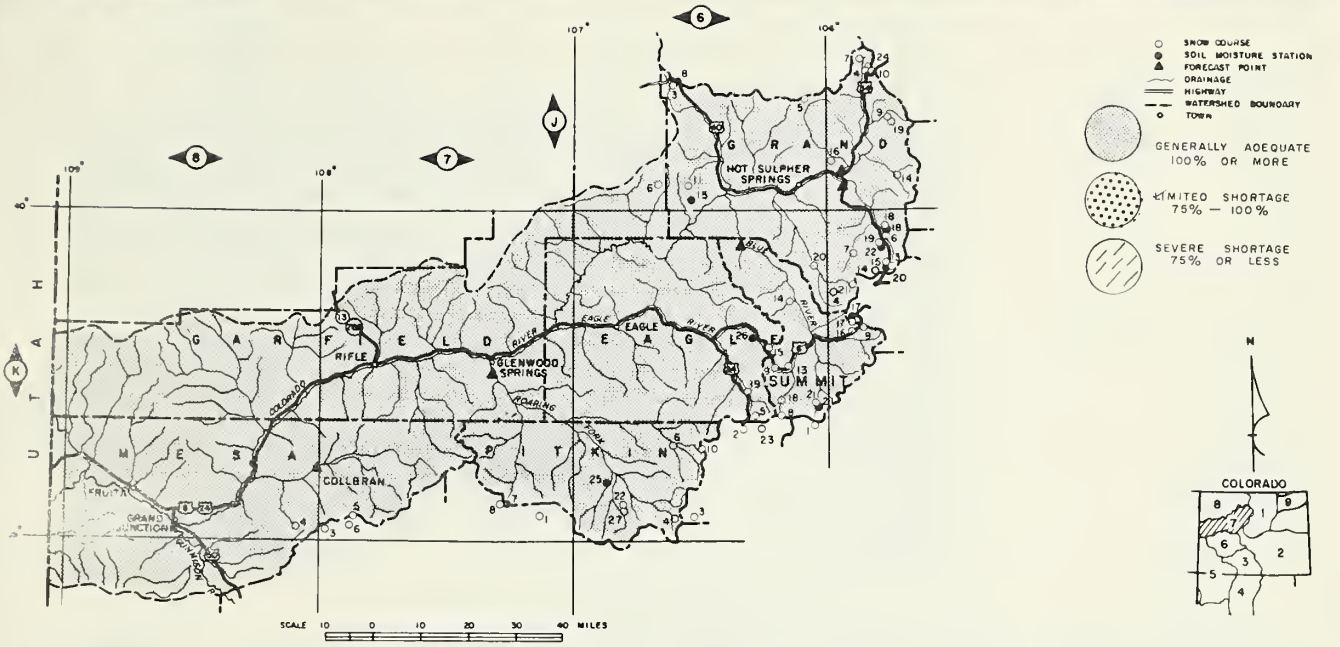
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

COLORADO RIVER WATERSHED IN COLORADO

as of

February 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- This report is the most optimistic one in several years. Snowfall is above average over the entire basin and with even normal snowfall for the rest of the year, water supplies should be adequate for downstream water users.

SNOW -- Snow cover over the entire basin is good. The headwaters snow courses indicate the snow pack is 130% of average. Snow on the Roaring Fork is slightly better with 140% of normal while headwaters of Plateau indicates a snow pack of 120%. Many of the snow courses were read prior to the 1st of the month storm so will not show current snow pack.

SOIL MOISTURE -- Soil moisture conditions in the high mountain areas is not quite as good as last year and in all cases less than normal. This will tend to reduce runoff slightly. Soil mantle must be saturated prior to runoff. Valley soil moisture is reported as fair.

RESERVOIR STORAGE -- Granby Reservoir contains 93,400 acre feet of carry-over compared to 214,600 acre feet average. Green Mountain and Williams Fork Reservoirs are similar to last year.

FORECASTS -- Numerical forecasts are made starting March 1, 1965 after the snow season has progressed farther.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist,
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Grand Junction, Colorado
J. L. Hall, Area Conservationist,
Glenwood Springs, Colorado

SNOW

SNOW COURSE	NO.	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVERAGE 1946-62
Colorado River						
Arrow	5K6	1/29	42	9.6	4.6	6.8
Berthoud Pass	5K3	1/27	42	10.9	5.5	9.2
Berthoud Summit	5K14	2/1	57	14.3	7.3	12.3*
Blue River	6K21	1/28	35	8.5	3.0	5.2*
Cooper Hill	6K23	1/29	41	9.5	3.2	- -
Fiddlers Gulch	6K5	Est.	40	12.2	6.2	10.5
Fremont Pass	6K8	1/28	46	12.8	5.9	10.7
Frisco	6K13	1/28	31	6.5	1.9	5.6*
Glen Mar Ranch	6K20	1/28	30	6.3	3.2	5.6
Gore Pass	6J11	1/27	35	8.5	3.9	6.8*
Granby	5J16	1/29	42	7.7	2.8	4.9*
Grand Lake	5J19	1/27	33	7.5	3.1	5.7*
Grizzly Peak	5K9	1/29	68	16.4	5.4	11.5
Hoosier Pass	6K1	1/28	46	12.6	4.2	8.1
Jones Pass	5K21	1/27	39	10.3	4.9	8.5*
Lake Irene	5J10	Est.	65	18.4	8.6	14.1
Lapland	5K7	1/28	33	8.5	4.0	- -
Lulu	5J7	NS			NS	- -
Lynx Pass	6J6	1/27	39	9.0	5.8	7.2
McKinzie Gulch	6K28	1/25	29	5.3	1.7	- -
Middle Fork Campground	5K4	1/28	33	7.2	3.3	6.0
Milner	5J24	NS			NS	- -
Monarch Lake	5J14	NS			NS	7.5
North Inlet to Grand Lake	5J9	Est.	36	8.1	3.5	6.4
Pando	6K19	1/27	27	8.6	4.0	5.9*
Phantom Valley	5J4	1/27	35	8.3	4.1	7.2
Ranch Creek	5K18	1/29	33	7.2	3.9	5.1*
Shrine Pass	6K9	1/28	50	11.4	6.4	11.1
Snake River	5K16	1/28	37	8.5	2.6	6.1*
Summit Ranch	6K14	Est.	31	7.2	2.5	5.6*
Tennessee Pass	6K2	1/28	41	9.8	3.9	6.4
Vail Pass	6K15	1/28	65	15.2	5.6	10.9*
Vasquez Creek	5K19	1/28	38	9.1	4.7	7.7
Willow Creek Pass	6J5	1/28	41	9.6	4.6	8.1
Roaring Fork River						
Aspen	7J22	1/28	51	14.5	4.6	- -
Independence Pass Tunnel	6K4	1/20	39	12.0	6.0	10.7
Ivanhoe	6K10	1/25	48	13.4	6.0	11.1
Lift	7K27	1/28	53	16.9	7.3	10.5*
McClure Pass (A)	7K8	2/1	58	16.8	7.3	12.5*
Nast	6K6	1/25	32	5.3	1.8	- -
North Lost Trail	7K1	2/1	65	15.9	6.4	9.5
Plateau Creek						
Alexander Lake (A)(B)	7K3	2/1	54	13.5	7.0	12.9
Mesa Lakes	7K4	1/28	47	11.9	6.5	10.8
Park Reservoir (A)(B)	7K6	2/1	62	17.1	8.3	13.9
Trickle Divide (A)	7K5	2/1	62	17.1	9.5	15.3

* NOTE: 1948-62 (ADJUSTED AVERAGES)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Granby	465.5	93.4	203.1	214.6
Green Mountain	146.9	76.4	61.6	86.5
Williams Fork	96.8	15.8	22.3	- -

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Berthoud Pass	11/17	3.9	2.5	3.0	2.6
Blue River	11/23	4.2	2.6	3.6	2.7
Gore	11/12	4.9	2.1	2.1	2.5
Grand Mesa	11/9	12.5	9.0	8.4	- -
Muddy Pass	11/11	11.1	6.1	6.2	6.4
Placita	11/16	9.3	3.9	4.7	5.1
Ranch Creek	11/13	8.7	5.6	6.0	6.2
Vail	12/2	12.3	4.3	3.8	7.4
Vasquez Siphon	11/13	11.0	6.8	7.7	7.4

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1946-62
No forecasts issued until March 1, 1965			

(4) Observed flow plus diversions by Adams tunnel and Grand River ditch plus change in storage in Granby Reservoir.
(5) Observed flow plus the changes as indicated in (4) plus Moffat Ditch.
(6) Observed flow plus diversion through Twin Lakes tunnel

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Soil Conservation Service
Colorado State University
Fort Collins, Colorado

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U.S. DEPARTMENT OF AGRICULTURE

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DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Snow Survey
Colorado State University
Fort Collins, Colorado

OFFICIAL BUSINESS

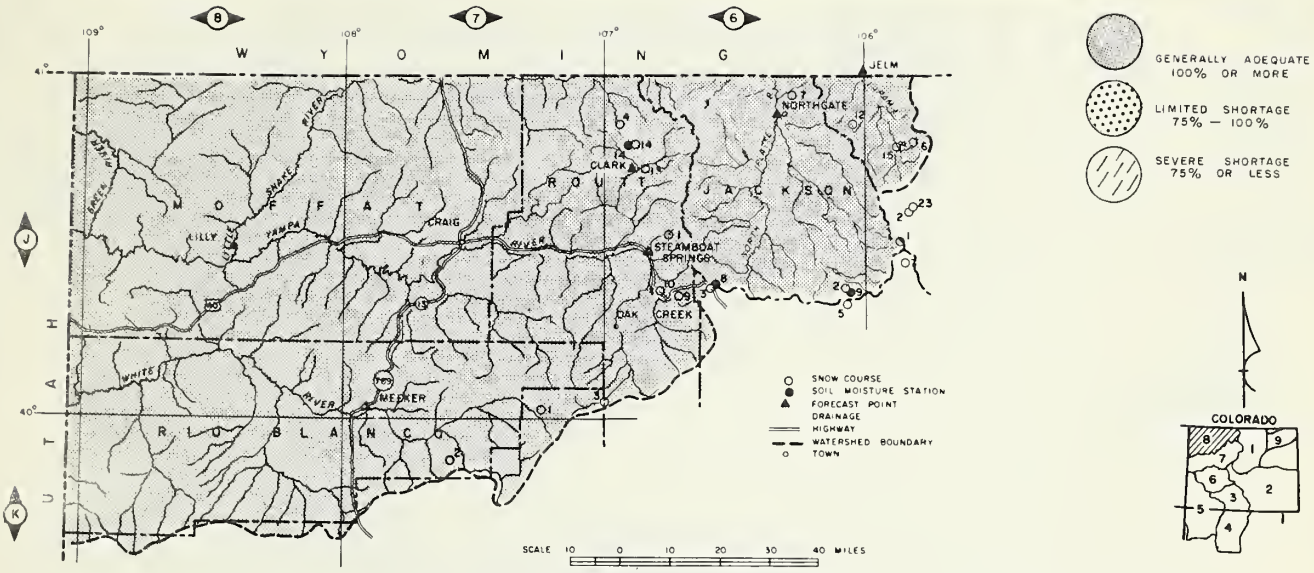
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

YAMPA, WHITE, AND NORTH PLATTE RIVERS WATERSHEDS IN COLORADO

as of

February 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERAL -- Current snow pack indicates at least an average water supply this summer. All three basins have above average snow packs. If snow continues to increase at the current rate above average runoff should occur on all streams.

SNOW — Snow pack on the North Platte Drainage is 120% of normal, while the White River Basin has about 145% of normal snow cover. The Yampa watershed has the lowest of the three with 110% of normal. Most of the snow surveys were taken prior to the month end storm, so the averages may be slightly low. Most snow courses have twice as much snow as last year at this time.

SOIL MOISTURE -- Soils in the higher elevations are slightly drier than last year at this time and much drier than normal. Valley soils are reported as fairly dry for this time of year.

FORECASTS -- Numerical forecasts are not made until March 1, 1965. At this time the snow season is more advanced and more reliable estimates of runoff can be made. Generally all flows in this area should be above normal.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist, Colorado

J. L. Hall, Area Conservationist, Glenwood Springs, Colorado

SNOW

SNOW COURSE		NO.	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVERAGE 1948-62
North Platte River							
Cameron Pass	(A)	5J1				12.2	13.7
Columbine Lodge		6J3	1/27	66	17.4	9.2	15.7
Deadman Hill	(A)(B)	5J6				7.5	8.8
McIntyre	(B)	5J15	NS			NS	- -
Northgate		6J7	1/27	22	5.0	2.8	3.9*
Park View		6J2	1/28	33	8.2	3.8	5.8
Roach	(A)	6J12				NS	11.1
Willow Creek Pass	(B)	6J5	1/28	41	9.6	4.6	8.1
Yampa River							
Bear River		7J3	NS			NS	- -
Clark	(A)	6J13	2/2	48	12.7	7.9	- -
Columbine Lodge	(B)	6J3	1/27	66	17.4	9.2	15.7
Dry Lake	(A)	6J1	2/2	48	12.7	8.8	13.6
Elk River	(A)	6J4	2/2	57	14.8	9.0	11.5
Hahn's Peak		6J14	NS			NS	- -
Lynx Pass	(B)	6J6	1/27	39	9.0	5.8	7.2
Rabbit Ears		6J9	1/27	69	17.3	12.3	19.1
Yampa View		6J10	1/27	46	11.3	7.1	9.8*
White River							
Burro Mountain	(A)	7K2	2/1	62	16.1	9.4	11.0
Rio Blanco		7J1	1/22	43	14.4	7.2	9.9

* - NOTE: 1948-62 (ADJUSTED AVERAGES)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Hahn's Peak	11/12	19.0	8.9	13.3	14.4
Laramie Road	11/5	12.4	7.1	7.1	7.6
Muddy Pass	11/11	11.1	6.1	6.2	6.4
Two Mile	12/2	9.1	4.4	4.2	5.8
Willow Pass	10/15	9.5	5.7	7.3	6.8

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
No forecasts issued until March 1, 1965			

This Report Prepared by
Jack N. Washichek and Don W. McAndrew
Soil Conservation Service
Colorado State University
Fort Collins, Colorado

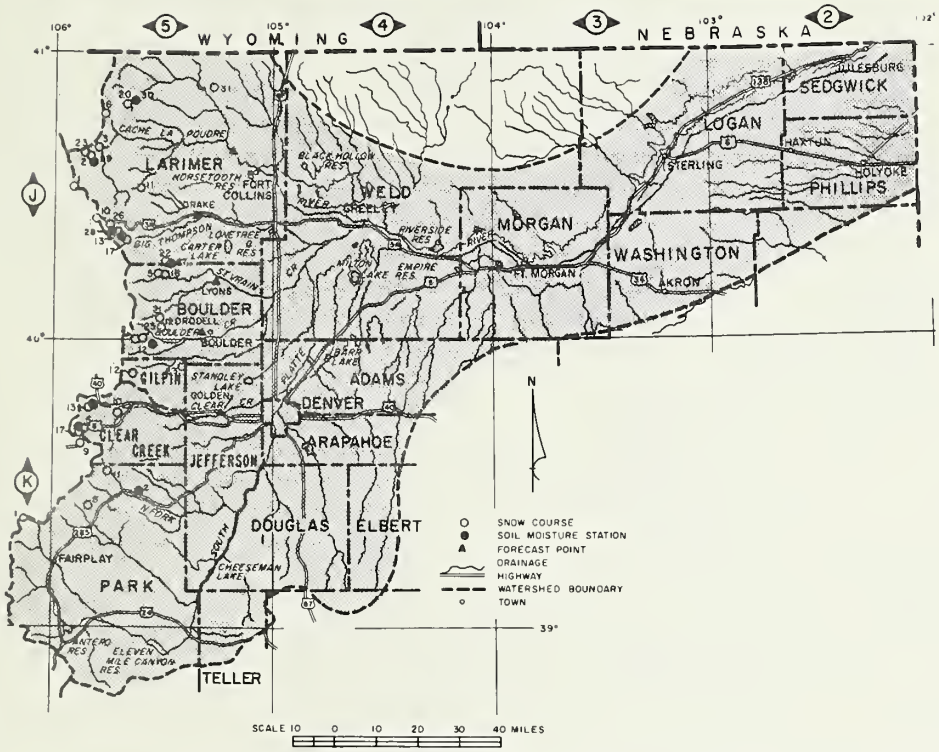
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

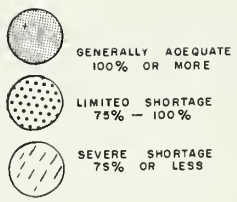
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

February 1, 1965

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO





GENERAL -- Snow cover in the South Platte Drainage is generally above normal, however, several spots along the front range are slightly below the 15 year average. The South Platte area has been in a fortunate position for the last several years. Despite deficient runoff, water supplies have generally been sufficient due to good reservoir storage. Storage is now somewhat depleted and good summer streamflow is necessary.

SNOW -- Average snow pack over the entire drainage stands at 125% of the 15 year average. Most of the snow surveys were made prior to the first of the month storm, but surveys made after that date indicate only a small increase.

SOIL MOISTURE -- Soil moisture conditions are almost identical to last year, but slightly poorer than normal in the high mountains. Valley soils are dry. Some areas received some relief over the 1st of the month storm.

RESERVOIR STORAGE — Water held in storage in the major reservoirs on the Lower South Platte is similar to last year at this time and below normal for this date.

FORECASTS — Numerical forecasts are made March 1, 1965.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

ISSUED BY: SOIL CONSERVATION SERVICE

F. A. Mark, State Conservationist, Colorado

Wallace L. Bruce, Area Conservationist Sterling, Colorado

SNOW

SNOW COURSE		NO.	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVERAGE 1948-62
South Platte River and Tributaries							
Baltimore		5K23	2/1	28	6.1	2.8	- -
Berthoud Falls		5K13	2/1	55	12.5	5.8	9.0*
Big South		5J3	1/30	18	2.9	0.6	2.0
Boulder Falls		5J25	2/1	51	11.6	4.2	7.9*
Cameron Pass	(A)	5J1	Est.	60	15.6	12.2	13.7
Chambers Lake		5J2	1/30	37	8.8	2.8	6.0
Copeland Lake		5J18	1/28	16	3.2	1.7	3.8*
Deadman Hill	(A)	5J6	NS			7.5	8.8
Deer Ridge		5J17	1/29	15	2.9	1.6	3.6*
Empire		5K10	2/1	31	6.5	3.6	4.9*
Geneva Park		5K11	NS			NS	3.5*
Grizzly Peak	(B)	5K9	1/29	68	16.4	5.4	11.5
Hidden Valley		5J13	1/29	33	7.3	3.9	7.5
Hoosier Pass		6K1	1/28	46	12.6	4.2	8.1
Hour Glass Lake		5J11	NS			NS	4.3
Jefferson Creek		5K8	NS			NS	6.0*
Lake Irene	(B)	5J10	Est.	65	18.4	8.6	14.1
Long's Peak		5J22	1/31	44	9.3	2.9	7.6*
Lost Lake		5J23	1/30	48	11.5	4.7	8.2*
Loveland Lift No. 1		5K24	1/29	68	17.2	7.7	- -
Loveland Pass		5K5	1/29	51	14.0	4.8	9.6
Pine Creek		5J31	1/27	2	0.6	0.3	- -
Red Feather		5J10	1/27	13	2.8	1.8	5.1*
Two Mile		5J26	1/29	47	10.3	5.5	9.0*
University Camp		5J8	2/1	65	17.5	4.7	12.9
Ward		5J21	1/27	17	3.9	1.9	4.0*
Wild Basin		5J5	Est.	42	9.6	4.1	9.4

RESERVOIR STORAGE (1,000 AC. FT.)

MEASURED FIRST OF MONTH

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Carter	108.9	70.5	67.2	54.0
Cheeseman	79.0	21.3	22.7	49.4
Eleven Mile	81.9	28.3	60.8	74.2
Empire	37.7	15.4	28.1	22.5
Horsetooth	143.5	69.4	65.3	61.1
Jackson	35.4	27.6	27.1	26.8
Julesburg	28.2	21.2	19.0	20.0
Prewitt	32.8	0	7.5	15.8
Point of Rocks	70.0	23.7	26.5	44.8
Riverside	57.5	29.1	31.6	38.8

STREAMFLOW FORECAST

(1,000 AC. FT.)

APRIL THROUGH SEPTEMBER

STREAM AND STATION	FORECAST APRIL - SEPT.	THIS YEAR % AVERAGE	AVERAGE 1948-62
No forecasts issued until March 1, 1965			

NOTE: * - 1948-62 ADJUSTED AVERAGES
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Alpine Camp	11/19	6.9	3.2	3.3	3.5
Beaver Dam	12/2	7.1	3.0	3.3	3.8
Clear Creek	12/2	9.5	7.0	7.6	6.7
Feather	11/5	10.1	4.2	4.2	4.6
Guard Station	12/2	6.9	2.8	3.1	3.4
Hoop Creek	11/17	4.9	2.6	3.6	2.7
Hoosier Pass	11/23	7.8	4.3	4.9	5.1
Kenosha Pass	11/23	4.4	2.3	2.8	2.6
Laramie Road	11/5	12.4	7.1	7.1	7.6
Two Mile	12/2	9.1	4.4	4.2	5.8

ALL PROFILES 4 FEET DEEP

(1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
(2) Observed flow plus by-pass to power plants.
(3) Observed flow minus diversions through Jones Tunnel.

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LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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SOIL CONSERVATION SERVICE
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COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation , navigation , mining and industry

"The Conservation of Water begins with the Snow Survey"